

ABSTRACT OF THE DISCLOSURE

An opto-electronic device configured as a photodetector has a capacitor and/or resistor monolithically formed on a surface of the photodetector. The capacitor capacitively couples the AC ground of the photodetector to the bias terminal of the photodetector. The on chip capacitor design eliminates the inductance of external circuit traces between the power supply and an external capacitor. The resistor forces the AC return current of the photodetector through the AC ground in preference to the typical (DC bias terminal) path. Combinations of capacitors and resistors are particularly effective in reducing crosstalk among adjacent detectors in arrays.